

jobs, or general industry employers whose employees report an MSD as defined in the proposal.

*Frequency of Response:* Frequency of response will be determined by whether the employer has manufacturing and/or manual handling jobs, the number of MSDs reported, and actions the employer will take in response to the MSD; that is, whether the employer chooses to use a quick fix option, or must establish an ergonomics program.

*Average Time per Response:* Time per response varies, from minimal recordkeeping for a quick fix MSD situation, to establishing and implementing a complete ergonomics program.

*Total Burden Hours:* Approximately 21,402,291 hours.

*Estimated Costs (Operating and Maintenance):* \$513,332,000 (purchasing services).

The Agency has submitted a copy of the information collection request to OMB for its review and approval. Interested parties are requested to send comments regarding this information collection to the Office of Information and Regulatory Affairs, Attn. OSHA Desk Officer, OMB, New Executive Office Building, 725 17th Street NW, Room 10235, Washington, DC 20503.

Comments submitted in response to this notice will be summarized and/or included in the request for Office of Management and Budget approval of the final information collection request: they will also become a matter of public record.

Copies of the referenced information collection request are available for inspection and copying in the OSHA Docket Office and will be mailed immediately to persons who request copies by telephoning Todd Owen or Barbara Bielaski at (202) 693-2444. For electronic copies of the ergonomics information collection request, contact the OSHA webpage on the Internet at <http://www.osha.gov/>. Copies of the information collection request are also available at the OMB docket office.

## **XVII. Authority and Signature**

This document was prepared under the direction of Charles N. Jeffress, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210.

Pursuant to sections 4, 6 and 8, Occupational Safety and Health Act, 29 U.S.C. 653, 655, 657, Secretary of Labor's Orders Nos. 12-71 (36 FR 8754, 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), or 6-96 (62 FR 111), as applicable, and 29 CFR Part 1911; 29 CFR part 1910 is amended as set forth below.

### **List of Subjects in 29 CFR Part 1910**

Ergonomics program, Health, Musculoskeletal disorders, Health, Occupational safety and health, Reporting and recordkeeping requirements.

Signed, at Washington, DC, this 1st day of November, 1999.

**Charles N. Jeffress,**  
Assistant Secretary of Labor for Occupational Safety and Health.

## **XVIII. The Proposed Standard**

### *General Industry*

The Occupational Safety and Health Administration proposes to amend Part 1910 of title 29 of the Code of Federal Regulations as follows:

### **PART 1910—[AMENDED]**

1. New Subpart Y of 29 CFR Part 1910 is added to read as follows:

#### **Subpart Y—Ergonomics Program Standard**

Sec.

1910.900 Table of contents

#### **Does This Standard Apply to Me?**

1910.901 Does this standard apply to me?

1910.902 Does this standard allow me to rule out some MSDs?

1910.903 Does this standard apply to the entire workplace or to other workplaces in the company?

1910.904 Are there areas this standard does not cover?

#### **How Does This Standard Apply to Me?**

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1910.906 How does this standard apply to manufacturing and manual handling jobs?

1910.907 How does this standard apply to other jobs in general industry?

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#### **Management Leadership and Employee Participation**

1910.911 What is my basic obligation?

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1910.914 What is my basic obligation?

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1910.916 What must I do to set up a reporting system?

#### **Job Hazard Analysis and Control**

1910.917 What is my basic obligation?

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1910.921 How far must I go in eliminating or materially reducing MSD hazards when a covered MSD occurs?

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**What Records Must I Keep?**

- 1910.939 Do I have to keep records of the ergonomics program?  
 1910.940 What records must I keep and for how long?

**When Must My Program be in Place?**

- 1910.941 When does this standard become effective?  
 1910.942 When do I have to be in compliance with this standard?  
 1910.943 What must I do if some or all of the compliance deadlines have passed before a covered MSD is reported?  
 1910.944 May I discontinue certain aspects of my program if covered MSDs no longer are occurring?

**Definitions**

- 1910.945 What are the key terms in this standard?

**Subpart Y—Ergonomics Program Standard**

**Authority:** Secs. 4, 6 and 8, Occupational Safety and Health Act, 29 U.S.C. 653, 655, 657, Secretary of Labor's Orders Nos. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), or 6-96 (62 FR 111), as applicable; and 29 CFR Part 1911.

**§ 1910.900 Table of contents.**

This section is the table of contents for the sections in Subpart Y:

**Does This Standard Apply to Me?**

Sec.

- 1910.901 Does this standard apply to me?  
 1910.902 Does this standard allow me to rule out some MSDs?  
 1910.903 Does this standard apply to the entire workplace or to other workplaces in the company?  
 1910.904 Are there areas this standard does not cover?

**How Does This Standard Apply to Me?**

- 1910.905 What are the elements of a complete ergonomics program?  
 1910.906 How does this standard apply to manufacturing and manual handling jobs?  
 1910.907 How does this standard apply to other jobs in general industry?  
 1910.908 How does this standard apply if I already have an ergonomics program?  
 1910.909 May I use a Quick Fix instead of setting up a full ergonomics program?  
 1910.910 What must I do if the Quick Fix does not work?

**Management Leadership and Employee Participation**

- 1910.911 What is my basic obligation?  
 1910.912 What must I do to provide management leadership?  
 1910.913 What ways must employees have to participate in the ergonomics program?

**Hazard Information and Reporting**

- 1910.914 What is my basic obligation?  
 1910.915 What information must I provide to employees?  
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**Job Hazard Analysis and Control**

- 1910.917 What is my basic obligation?  
 1910.918 What must I do to analyze a problem job?  
 1910.919 What hazard control steps must I follow?  
 1910.920 What kinds of controls must I use?  
 1910.921 How far must I go in eliminating or materially reducing MSD hazards when a covered MSD occurs?  
 1910.922 What is the "incremental abatement process" for materially reducing MSD hazards?

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**Program Evaluation**

- 1910.936 What is my basic obligation?  
 1910.937 What must I do to evaluate my ergonomics program?  
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 1910.944 May I discontinue certain aspects of my program if covered MSDs no longer are occurring?

**Definitions**

- 1910.945 What are the key terms in this standard?

**Note to § 1910.900:** In this standard, the terms that are defined in § 1910.945 are put in "quotations" the first time they appear.

**Does This Standard Apply to Me?****§ 1910.901 Does this standard apply to me?**

This standard applies to employers in general industry whose employees work in "manufacturing jobs" or "manual handling jobs," or report "musculoskeletal disorders (MSDs)" that meet the criteria of this standard. This standard applies to the following "jobs":

(a) *Manufacturing jobs.* Manufacturing jobs are production jobs in which employees perform the "physical work activities" of producing a product and in which these activities make up a significant amount of their worktime;

(b) *Manual handling jobs.* Manual handling jobs are jobs in which employees perform forceful lifting/lowering, pushing/pulling, or carrying. Manual handling jobs include only those jobs in which forceful manual handling is a core element of the employee's job; and

**Note to paragraphs (a) and (b):** Although each manufacturing and manual handling job must be considered on the basis of its actual physical work activities and conditions, the definitions section of this standard (§ 1910.945) includes a list of jobs that are typically included in and excluded from these definitions.

(c) *Jobs with a musculoskeletal disorder.* Jobs with an MSD are those jobs in which an employee reports an MSD that meets all of these criteria:

(1) The MSD is reported after [the effective date of the final rule];

(2) The MSD is an "OSHA recordable MSD," or one that would be recordable if "you" were required to keep OSHA injury and illness records; and

(3) The MSD also meets the screening criteria in § 1910.902.

**Note to paragraph (c):** In this standard, the term "covered MSD" refers to a musculoskeletal disorder that meets the requirements of this section.

**§ 1910.902 Does this standard allow me to rule out some MSDs?**

Yes. The standard only covers those OSHA recordable MSDs that also meet these screening criteria:

(a) The physical work activities and conditions in the job are reasonably likely to cause or contribute to the type of MSD reported; and

(b) These activities and conditions are a core element of the job and/or make up a significant amount of the employee's worktime.

**§ 1910.903 Does this standard apply to the entire workplace or to other workplaces in the company?**

No. This standard is job-based. It only applies to the jobs specified in § 1910.901, not to your entire workplace or to other workplaces in your company.

**§ 1910.904 Are there areas this standard does not cover?**

Yes. This standard does not apply to agriculture, construction or maritime operations.

**How Does This Standard Apply to Me?**

**§ 1910.905 What are the elements of a complete ergonomics program?**

In this standard, a full "ergonomics" program consists of these six program elements:

- (a) Management Leadership and Employee Participation;
- (b) Hazard Information and Reporting;
- (c) Job Hazard Analysis and Control;
- (d) Training;
- (e) "MSD Management," and
- (f) Program Evaluation.

**§ 1910.906 How does this standard apply to manufacturing and manual handling jobs?**

You must:

(a) Implement the first two elements of the ergonomics program (Management Leadership and Employee Participation, and Hazard Information and Reporting) even if no MSD has occurred in those jobs.

(b) Implement the other program elements when either of the following occurs in those jobs (unless you "eliminate MSD hazards" using the Quick Fix option in § 1910.909):

- (1) A covered MSD is reported; or
- (2) "Persistent MSD symptoms" are reported plus:
  - (i) You "have knowledge" that an MSD hazard exists in the job;
  - (ii) Physical work activities and conditions in the job are reasonably likely to cause or contribute to the type of "MSD symptoms" reported; and
  - (iii) These activities and conditions are a core element of the job and/or make up a significant amount of the employee's worktime.

**Note to § 1910.906:** "Covered MSD" refers to MSDs that meet the criteria in § 1910.901(c). As it applies to manufacturing and manual handling jobs, "covered MSD" also refers to persistent MSD symptoms that meet the criteria of this section.

**§ 1910.907 How does this standard apply to other jobs in general industry?**

In other jobs in general industry, you must comply with all of the program elements in the standard when a covered MSD is reported (unless you eliminate the MSD hazards using the Quick Fix option).

**§ 1910.908 How does this standard apply if I already have an ergonomics program?**

If you already have an ergonomics program for the jobs this standard covers, you may continue that program, even if it differs from the one this standard requires, provided you show that:

(a) Your program satisfies the basic obligation section of each program element in this standard, and you are in compliance with the recordkeeping requirements of this standard (§§ 1910.939 and 1910.940);

(b) You have implemented and evaluated your program and controls before [the effective date of the final rule]; and

(c) The evaluation indicates that the program elements are functioning properly and that you are in compliance with the control requirements in § 1910.921.

**§ 1910.909 May I use a Quick Fix instead of setting up a full ergonomics program?**

Yes. A Quick Fix is a way to fix a "problem job" quickly and completely. If you "eliminate MSD hazards" using a Quick Fix, you do not have to set up the full ergonomics program this standard requires. You must do the following when you Quick Fix a problem job:

(a) Promptly make available the MSD management this standard requires;

(b) Consult with employee(s) in the problem job about the physical work activities or conditions of the job they associate with the difficulties, observe the employee(s) performing the job to identify whether any risk factors are present, and ask employee(s) for recommendations for eliminating the MSD hazard;

(c) Put in Quick Fix controls within 90 days after the covered MSD is identified, and check the job within the next 30 days to determine whether the controls have eliminated the hazard;

(d) Keep a record of the Quick Fix controls; and

(e) Provide the hazard information this standard requires to employee(s) in the problem job within the 90-day period.

**Note to § 1910.909:** If you show that the MSD hazards only pose a risk to the employee with the covered MSD, you may limit the Quick Fix to that individual employee's job.

**§ 1910.910 What must I do if the Quick Fix does not work?**

You must set up the complete ergonomics program if either of these occurs:

(a) The Quick Fix controls do not eliminate the MSD hazards within the Quick Fix deadline (within 120 days after the covered MSD is identified); or

(b) Another covered MSD is reported in that job within 36 months.

**Note to § 1910.910: Exception:** If a second covered MSD occurs in that job resulting from different physical work activities and conditions, you may use the Quick Fix a second time.

**Management Leadership and Employee Participation**

**§ 1910.911 What is my basic obligation?**

You must demonstrate management leadership of your ergonomics program. Employees (and their designated

representatives) must have ways to report "MSD signs" and "MSD symptoms;" get responses to reports; and be involved in developing, implementing and evaluating each element of your program. You must not have policies or practices that discourage employees from participating in the program or from reporting MSDs signs or symptoms.

**§ 1910.912 What must I do to provide management leadership?**

You must:

(a) Assign and communicate responsibilities for setting up and managing the ergonomics program so managers, supervisors and employees know what you expect of them and how you will hold them accountable for meeting those responsibilities;

(b) Provide those persons with the authority, "resources," information and training necessary to meet their responsibilities;

(c) Examine your existing policies and practices to ensure that they encourage and do not discourage reporting and participation in the ergonomics program; and

(d) Communicate "periodically" with employees about the program and their concerns about MSDs.

**§ 1910.913 What ways must employees have to participate in the ergonomics program?**

Employees (and their designated representatives) must have:

(a) A way to report MSD signs and symptoms;

(b) Prompt responses to their reports;

(c) Access to this standard and to information about the ergonomics program; and

(d) Ways to be involved in developing, implementing and evaluating each element of the ergonomics program.

**Hazard Information and Reporting**

**§ 1910.914 What is my basic obligation?**

You must set up a way for employees to report MSD signs and symptoms and to get prompt responses. You must evaluate employee reports of MSD signs and symptoms to determine whether a covered MSD has occurred. You must periodically provide information to employees that explains how to identify and report MSD signs and symptoms.

**§ 1910.915 What information must I provide to employees?**

You must provide this information to current and new employees:

(a) Common MSD hazards;

(b) The signs and symptoms of MSDs, and the importance of reporting them early;

(c) How to report MSD signs and symptoms; and

(d) A summary of the requirements of this standard.

**§ 1910.916 What must I do to set up a reporting system?**

You must:

(a) Identify at least one person to receive and respond to employee reports, and to take the action this standard requires.

(b) Promptly respond to employee reports of MSD signs or symptoms in accordance with this standard.

**Job Hazard Analysis and Control**

**§ 1910.917 What is my basic obligation?**

You must analyze the problem job to identify the "ergonomic risk factors" that result in MSD hazards. You must eliminate the MSD hazards, reduce them to the extent feasible, or materially reduce them using the incremental abatement process in this standard. If you show that the MSD hazards only pose a risk to the employee with the covered MSD, you may limit the job hazard analysis and control to that individual employee's job.

**§ 1910.918 What must I do to analyze a problem job?**

You must:

(a) Include in the job hazard analysis all of the employees in the problem job or those who represent the range of physical capabilities of employees in the job;

(b) Ask the employees whether performing the job poses physical difficulties and, if so, which physical work activities or conditions of the job they associate with the difficulties;

(c) Observe the employees performing the job to identify which of the following physical work activities, workplace conditions and ergonomic risk factors are present:

PHYSICAL WORK ACTIVITIES AND CONDITIONS	ERGONOMIC RISK FACTORS THAT MAY BE PRESENT
(1) Exerting considerable physical effort to complete a motion	(i) Force (ii) Awkward postures (iii) Contact stress
(2) Doing same motion over and over again	(i) Repetition (ii) Force (iii) Awkward postures (iv) Cold temperatures
(3) Performing motions constantly without short pauses or breaks in between	(i) Repetition (ii) Force (iii) Awkward postures (iv) Static postures (v) Contact stress (vi) Vibration
(4) Performing tasks that involve long reaches	(i) Awkward postures (ii) Static postures (iii) Force
(5) Working surfaces are too high or too low	(i) Awkward postures (ii) Static postures (iii) Force (iv) Contact stress
(6) Maintaining same position or posture while performing tasks	(i) Awkward posture (ii) Static postures (iii) Force (iv) Cold temperatures
(7) Sitting for a long time	(i) Awkward posture (ii) Static postures (iii) Contact stress

PHYSICAL WORK ACTIVITIES AND CONDITIONS	ERGONOMIC RISK FACTORS THAT MAY BE PRESENT
(8) Using hand and power tools	(i) Force (ii) Awkward postures (iii) Static postures (iv) Contact stress (v) Vibration (vi) Cold temperatures
(9) Vibrating working surfaces, machinery or vehicles	(i) Vibration (ii) Force (iii) Cold temperatures
(10) Workstation edges or objects press hard into muscles or tendons	(i) Contact stress
(11) Using hand as a hammer	(i) Contact stress (ii) Force
(12) Using hands or body as clamp to hold object while performing tasks	(i) Force (ii) Static postures (iii) Awkward postures (iv) Contact stress
(13) Gloves are bulky, too large or too small	(i) Force (ii) Contact stress
<b>MANUAL HANDLING</b> (lifting/lowering, pushing/pulling and carrying)	
(14) Objects or people moved are heavy	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures (v) Contact stress
(15) Horizontal reach is long (Distance of hands from body to grasp object to be handled)	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures (v) Contact stress
(16) Vertical reach is below knees or above the shoulders (Distance of hands above the ground when the object is grasped or released)	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures (v) Contact stress
(17) Objects or people are moved significant distance	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures (v) Contact stress
(18) Bending or twisting during manual handling	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures
(19) Object is slippery or has no handles	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures

PHYSICAL WORK ACTIVITIES AND CONDITIONS	ERGONOMIC RISK FACTORS THAT MAY BE PRESENT
(20) Floor surfaces are uneven, slippery or sloped	(i) Force (ii) Repetition (iii) Awkward postures (iv) Static postures

(d) Evaluate the ergonomic risk factors in the job to determine the MSD hazards associated with the covered MSD. As necessary, evaluate the duration, frequency and magnitude of employee exposure to the risk factors.

**§ 1910.919 What hazard control steps must I follow? You must:**

(a) Ask employees in the problem job for recommendations about eliminating or materially reducing the MSD hazards;

(b) Identify, assess and implement feasible controls (interim and/or permanent) to eliminate or materially reduce the MSD hazards. This includes prioritizing the control of hazards, where necessary;

(c) Track your progress in eliminating or materially reducing the MSD hazards. This includes consulting with employees in problem jobs about whether the implemented controls have eliminated or materially reduced the hazards; and

(d) Identify and evaluate MSD hazards when you change, design or purchase equipment or processes in problem jobs.

**§ 1910.920 What kinds of controls must I use?**

(a) In this standard, you must use any combination of "engineering," "administrative" and/or "work practice controls" to eliminate or materially reduce MSD hazards. Engineering controls, where feasible, are the preferred method for eliminating or materially reducing MSD hazards. However, administrative and work practice controls also may be important in addressing MSD hazards.

(b) "Personal protective equipment" (PPE) may be used to supplement engineering, work practice and administrative controls, but may only be used alone where other controls are not feasible. Where PPE is used, you must provide it at "no cost to employees."

**Note to § 1910.920:** Back belts/braces and wrist braces/splints are not considered PPE for the purposes of this standard.

**§ 1910.921 How far must I go in eliminating or materially reducing MSD hazards when a covered MSD occurs?**

The occurrence of a covered MSD in a problem job is not itself a violation of this standard. You must comply with one of the following:

(a) You implement controls that materially reduce the MSD hazards using the incremental abatement process in § 1910.922; or

**Note to paragraph (a):** "Materially reduce MSD hazards" means to reduce the duration, frequency and/or magnitude of exposure to one or more ergonomic risk factors in a way that is reasonably anticipated to significantly reduce the likelihood that covered MSDs will occur.

(b) You implement controls that reduce the MSD hazards to the extent feasible. Then, you periodically look to see whether additional controls are now feasible and, if so, you implement them promptly; or

(c) You implement controls that eliminate the MSD hazards in the problem job.

**Note to paragraph (c):** "Eliminate MSD hazards" means that you eliminate employee exposure to ergonomic risk factors associated with the covered MSD, or you reduce employee exposure to the risk factors to such a degree that a covered MSD is no longer reasonably likely to occur.

**§ 1910.922 What is the "incremental abatement process" for materially reducing MSD hazards?**

You may materially reduce MSD hazards using the following incremental abatement process:

(a) When a covered MSD occurs, you implement one or more controls that materially reduce the MSD hazards; and

(b) If continued exposure to MSD hazards in the job prevents the injured employee's condition from improving or another covered MSD occurs in that job, you implement additional feasible controls to materially reduce the hazard further; and

(c) You do not have to put in further controls if the injured employee's condition improves and no additional covered MSD occurs in the job. However, if the employee's condition does not improve or another covered MSD occurs, you must continue this incremental abatement process if other feasible controls are available.

**Training**

**§ 1910.923 What is my basic obligation?**

You must provide training to employees so they know about MSD hazards and your ergonomics program and measures for eliminating or materially reducing the hazards. You must provide training initially, periodically, and at least every 3 years at no cost to employees.

**§ 1910.924 Who must I train?**

You must train:

(a) Employees in problem jobs;

(b) Supervisors of employees in problem jobs; and

(c) Persons involved in setting up and managing the ergonomics program, except for any outside consultant you may use.

**§ 1910.925 What subjects must training cover?**

This table specifies the subjects training must cover:

YOU MUST PROVIDE TRAINING FOR...	SO THAT THEY KNOW...
(a) Employees in problem jobs and their supervisors	(1) How to recognize MSD signs and symptoms; (2) How to report MSD signs and symptoms, and the importance of early reporting; (3) MSD hazards in their jobs and the measures they must follow to protect themselves from exposure to MSD hazards; (4) Job-specific controls implemented in their jobs; (5) The ergonomics program and their role in it; and (6) The requirements of this standard.

YOU MUST PROVIDE TRAINING FOR...	SO THAT THEY KNOW...
(b) Persons involved in setting up and managing the ergonomics program	(1) The subjects above; (2) How to set up and manage an ergonomics program; (3) How to identify and analyze MSD hazards and measures to eliminate or materially reduce the hazards; and (4) How to evaluate the effectiveness of ergonomics programs and controls.

**§ 1910.926 What must I do to ensure that employees understand the training?**

You must provide training and information in language that employees understand. You also must give employees an opportunity to ask questions and receive answers.

**§ 1910.927 When must I train employees?**

This table specifies when you must train employees:

IF YOU HAVE...	THEN YOU MUST PROVIDE TRAINING AT THESE TIMES...
(a) Employees in problem jobs and their supervisors	(1) When a problem job is identified; (2) When initially assigned to a problem job; (3) Periodically as needed (e.g., when new hazards are identified in a problem job or changes are made to a problem job that may increase exposure to MSD hazards); and (4) At least every 3 years.
(b) Persons involved in setting up and managing the ergonomics program	(1) When they are initially assigned to setting up and managing the ergonomics program; (2) Periodically as needed (e.g., when evaluation reveals significant deficiencies in the program, when significant changes are made in the ergonomics program); and (3) At least every 3 years.

**§ 1910.928 Must I retrain employees who have received training already?**

No. You do not have to provide initial training to current employees, new employees and persons involved in setting up and managing the ergonomics programs if they have received training in the subjects this standard requires within the last 3 years. However, you must provide initial training in the subjects in which they have not been trained.

**MSD Management****§ 1910.929 What is my basic obligation?**

You must make MSD management available promptly whenever a covered MSD occurs. You must provide MSD management at no cost to employees. You must provide employees with the temporary "work restrictions" and "work restriction protection (WRP)" this standard requires.

**§ 1910.930 How must I make MSD management available?**

You must:

- (a) Respond promptly to employees with covered MSDs to prevent their condition from getting worse;
- (b) Promptly determine whether temporary work restrictions or other measures are necessary;
- (c) When necessary, provide employees with prompt access to a "health care professional" (HCP) for evaluation, management and "follow-up,"
- (d) Provide the HCP with the information necessary for conducting MSD management; and
- (e) Obtain a written opinion from the HCP and ensure that the employee is also promptly provided with it.

**§ 1910.931 What information must I provide to the health care professional (HCP)?**

You must provide:

- (a) A description of the employee's job and information about the MSD hazards in it;
- (b) A description of available work restrictions that are reasonably likely to fit the employee's capabilities during the recovery period;
- (c) A copy of this MSD management section and a summary of the requirements of this standard;
- (d) Opportunities to conduct workplace walkthroughs.

**§ 1910.932 What must the HCP's written opinion contain?**

The written opinion must contain:

- (a) The HCP's opinion about the employee's medical conditions related to the MSD hazard in the employee's job.
  - (1) You must instruct the HCP that any findings, diagnoses or information not related to workplace exposure to MSD hazards must remain confidential and must not be put in the written opinion or communicated to you.
  - (2) To the extent permitted and required by law, you must ensure employee privacy and confidentiality regarding medical conditions related to workplace exposure to MSD hazards that are identified during the MSD management process;
- (b) Any recommended temporary work restrictions and follow-up;
- (c) A statement that the HCP informed the employee about the results of the evaluation and any medical conditions resulting from exposure to MSD hazards that require further evaluation or treatment;
- (d) A statement that the HCP informed the employee about other physical activities that could aggravate the covered MSD during the recovery period.

**§ 1910.933 What must I do if temporary work restrictions are needed?**

You must:

- (a) *Work restrictions.* Provide temporary work restrictions, where necessary, to employees with covered MSDs. Where

you have referred the employee to a HCP, you must follow the temporary work restriction recommendations in the HCP's written opinion;

(b) *Follow-up.* Ensure that appropriate follow-up is provided during the recovery period; and

(c) *Work restriction protection (WRP).* Maintain the employee's WRP while temporary work restrictions are provided. You may condition the provision of WRP on the employee's participation in the MSD management this standard requires.

**§ 1910.934 How long must I maintain the employee's work restriction protection when an employee is on temporary work restriction?**

You must maintain the employee's WRP until the FIRST of these occurs:

- (a) The employee is determined to be able to return to the job;
- (b) You implement measures that eliminate the MSD hazards or materially reduce them to the extent that the job does not pose a risk of harm to the injured employee during the recovery period; or
- (c) 6 months have passed.

**§ 1910.935 May I offset an employee's WRP if the employee receives workers' compensation or other income?**

Yes. You may reduce the employee's WRP by the amount the employee receives during the work restriction period from:

- (a) Workers' compensation payments for lost earnings;
- (b) Payments for lost earnings from a compensation or insurance program that is publicly funded or funded by you; and
- (c) Income from a job taken with another employer that was made possible because of the work restrictions.

**Program evaluation****§ 1910.936 What is my basic obligation?**

You must evaluate your ergonomics program periodically, and at least every 3 years, to ensure that it is in compliance with this standard.

**§ 1910.937 What must I do to evaluate my ergonomics program?**

You must:

- (a) Consult with employees in problem jobs to assess their views on the effectiveness of the program and to identify any significant deficiencies in the program;
- (b) Evaluate the elements of your program to ensure they are functioning properly; and
- (c) Evaluate the program to ensure it is eliminating or materially reducing MSD hazards.

**§ 1910.938 What must I do if the evaluation indicates my program has deficiencies?**

If your evaluation indicates that your program has deficiencies, you must promptly take action to correct those deficiencies so that your program is in compliance with this standard.

**What Records Must I Keep?****§ 1910.939 Do I have to keep records of the ergonomics program?**

You only have to keep records if you had 10 or more employees (including part-time employees and employees

provided through personnel services) on any one day during the preceding calendar year.

**§ 1910.940 What records must I keep and for how long?**

This table specifies the records you must keep and how long you must keep them:

YOU MUST KEEP THESE RECORDS...	FOR AT LEAST...
(a) Employee reports and your responses	3 years
(b) Job hazard analysis	3 years or until replaced by updated records, whichever comes first
(c) Hazard control records	3 years or until replaced by updated records, whichever comes first
(d) Quick Fix control records	3 years or until replaced by updated records, whichever comes first
(e) Ergonomics program evaluation	3 years or until replaced by updated records, whichever comes first
(f) MSD management records	The duration of the injured employee's employment plus 3 years

**Note to § 1910.940:** The record retention period in this standard is shorter than that required by OSHA's rule on Access to Employee Exposure and Medical Records (29 CFR 1910.1020). However, you must comply with the other requirements of that rule.

**When Must My Program Be In Place?**

**§ 1910.941 When does this standard become effective?**

This standard becomes effective 60 days after [publication date of final rule].

**§ 1910.942 When do I have to be in compliance with this standard?**

This standard provides start-up time for setting up the ergonomics program and putting in controls in problem jobs. You must comply with the requirements of this standard, including recordkeeping, by the deadlines in this table:

YOU MUST COMPLY WITH THESE REQUIREMENTS AND RELATED RECORD-KEEPING...	NO LATER THAN...
(a) MSD management	Promptly when an MSD is reported
(b) Management leadership and employee participation	[1 year after the effective date of the final rule]
(c) Hazard information and reporting	[1 year after the effective date of the final rule]
(d) Job hazard analysis	[2 years after the effective date of the final rule]

**YOU MUST COMPLY WITH THESE REQUIREMENTS AND RELATED RECORD-KEEPING...**

**NO LATER THAN...**

(e) Interim controls	[2 years after the effective date of the final rule]
(f) Training	[2 years after the effective date of the final rule]
(g) Permanent controls	[3 years after the effective date of the final rule]
(h) Program evaluation	[3 years after the effective date of the final rule]

**Note to § 1910.942:** The compliance deadlines in this section do not apply if you are using a Quick Fix.

**§ 1910.943 What must I do if some or all of the compliance deadlines have passed before a covered MSD is reported?**

If the compliance start-up deadline has passed before you must comply with a particular element of this standard, you may take the following additional time to comply with that element and the related recordkeeping:

**YOU MUST COMPLY WITH THESE REQUIREMENTS AND RELATED RECORD-KEEPING...**

**WITHIN...**

(a) MSD management	5 days
(b) Management leadership and employee participation	30 days (In manufacturing and manual handling jobs, these requirements must be implemented by [1 year after the effective date of the final rule])
(c) Hazard information and reporting	30 days (In manufacturing and manual handling jobs, these requirements must be implemented by [1 year after the effective date of the final rule])
(d) Job hazard analysis	60 days
(e) Interim controls	90 days
(f) Training	90 days
(g) Permanent controls	1 year
(h) Program evaluation	1 year

**Note to § 1910.943:** The compliance deadlines in this section do not apply if you are using a Quick Fix.

**§ 1910.944 May I discontinue certain aspects of my program if covered MSDs no longer are occurring?**

Yes. However, as long as covered MSDs are reported in a job, you must maintain all the elements of the ergonomics program for that job. If you eliminate or materially reduce the MSD hazards and no covered MSD is reported for 3 years, you only have to continue the elements in this table:



IF YOU ELIMINATE OR MATERIALLY REDUCE THE HAZARDS AND NO COVERED MSD IS REPORTED FOR 3 YEARS IN...	THEN YOU MAY STOP ALL EXCEPT THE FOLLOWING PARTS OF YOUR PROGRAM IN THAT JOB...
(a) A manufacturing or manual handling job	(1) Management leadership and employee participation (2) Hazard information and reporting (3) Maintenance of implemented controls and training related to the controls.
(b) Other jobs in general industry where a covered MSD had been reported	Maintenance of controls and training related to the controls.

## Definitions

### § 910.945 What are the key terms in this standard?

*Administrative controls* are changes in the way that work in a job is assigned or scheduled that reduce the magnitude, frequency or duration of exposure to ergonomic risk factors. Examples of administrative controls for MSD hazards include:

- (1) Employee rotation;
- (2) Job task enlargement;
- (3) Alternative tasks;
- (4) Employer-authorized changes in work pace.

*Covered MSD* is:

(1) An MSD, reported in any job in general industry, that meets these criteria:

- (i) It is reported after [the effective date of the final rule];
- (ii) It is an OSHA recordable MSD;
- (iii) It occurred in a job in which the physical work activities and conditions are reasonably likely to cause or contribute to the type of MSD reported;
- (iv) These activities and conditions are a core element and/or make up a significant amount of the employee's worktime.

(2) In a manufacturing or manual handling job, persistent MSD symptoms are also considered a covered MSD if they meet these criteria:

- (i) They last for at least 7 consecutive days after they are reported;
- (ii) The employer has knowledge that an MSD hazard exists in the job;
- (iii) They occurred in a job in which the physical work activities and conditions are reasonably likely to cause or contribute to the type of MSD signs or symptoms reported; and

(iv) These activities and conditions are a core element and/or make up a significant amount of the employee's worktime.

*Eliminate MSD hazards* means to eliminate employee exposure to the ergonomic risk factors associated with the covered MSD, or to reduce employee exposure to the risk factors to such a degree that a covered MSD is no longer reasonably likely to occur.

*Engineering controls* are physical changes to a job that eliminate or materially reduce the presence of MSD hazards. Examples of engineering controls for MSD hazards include changing, modifying or redesigning the following:

- (1) Workstations;
- (2) Tools;
- (3) Facilities;
- (4) Equipment;
- (5) Materials;
- (6) Processes.

*Ergonomics* is the science of fitting jobs to people. Ergonomics encompasses the body of knowledge about physical abilities and limitations as well as other human characteristics that are relevant to job design.

*Ergonomic design* is the application of this body of knowledge to the design of the workplace (i.e., work tasks, equipment, environment) for safe and efficient use by workers.

*Ergonomic risk factors.* (1) Ergonomic risk factors are the following aspects of a job that pose a biomechanical stress to the worker:

- (i) Force (i.e., forceful exertions, including dynamic motions);
- (ii) Repetition;
- (iii) Awkward postures;
- (iv) Static postures;
- (v) Contact stress;
- (vi) Vibration; and
- (vii) Cold temperatures.

(2) Ergonomic risk factors are elements of MSD hazards that must be considered in light of their combined effect in causing or contributing to an MSD. Jobs that have multiple risk factors have a greater likelihood of causing or contributing to MSDs, depending on the duration, frequency and magnitude of employee exposure to each risk factor or to a combination of them. Ergonomic risk factors are also called ergonomic stressors and ergonomic factors.

*Follow-up* is the process or protocol an employer and/or HCP uses to check up on the condition of employees with covered MSDs when they are given temporary work restrictions during the recovery period. Prompt follow-up helps to ensure that the MSD is resolving and, if it is not, that other measures are promptly taken.

*Have knowledge* means that you have been provided information that MSD hazards exist in a manufacturing or manual handling job by any of the following:

- (1) An insurance company;
- (2) A consultant;
- (3) A health care professional;
- (4) A person or persons working for you who have the requisite training to identify and analyze MSD hazards.

*Health care professional (HCPs)* are physicians or other licensed health care professionals whose legally permitted scope of practice (e.g., license, registration or certification) allows them to independently provide or be delegated the responsibility to provide some or all of the MSD management requirements of this standard.

*Job* means the physical work activities or tasks that employees perform. In this standard, the term "job" also

includes those jobs involving the same physical work activities and conditions even if the jobs have different titles or classification.

*Manual handling jobs* are jobs in which employees perform forceful lifting/lowering, pushing/pulling, or carrying. Manual handling jobs include only those jobs in which forceful manual handling is a core element of an employee's job. Although each job must be considered on the basis of its actual physical work conditions and work activities, this table lists jobs that typically are included in and excluded from this definition:

(1) EXAMPLES OF JOBS THAT TYPICALLY ARE MANUAL HANDLING JOBS	(2) EXAMPLES OF JOBS/TASKS THAT TYPICALLY ARE NOT MANUAL HANDLING JOBS
(i) Patient handling jobs (e.g., nurses aides, orderlies, nurse assistants) (ii) Package sorting, handling and delivering (iii) Hand packing and packaging (iv) Baggage handling (e.g., porters, airline baggage handlers, airline check-in) (v) Warehouse manual picking and placing (vi) Beverage delivering and handling (vii) Stock handling and bagging (viii) Grocery store bagging (ix) Grocery store stocking (x) Garbage collecting	(i) Administrative jobs (ii) Clerical jobs (iii) Supervisory/managerial jobs that do not involve manual handling work (iv) Technical and professional jobs (v) Jobs involving unexpected manual handling (vi) Lifting object or person in emergency situation (e.g., lifting or carrying injured co-worker) (vii) Jobs involving manual handling that is so infrequent it does not occur on any predictable basis (e.g., filling in on a job due to unexpected circumstances, replacing empty water bottle, lifting of box of copier paper) (viii) Jobs involving manual handling that is done only on an infrequent "as needed" basis (e.g., assisting with delivery of large or heavy package, filling in once for an absent employee) (ix) Jobs involving minor manual handling that is incidental to the job (e.g., carrying briefcase to meeting, carrying baggage on work travel)

*Manufacturing jobs* are production jobs in which employees perform the physical work activities of producing a product and in which these activities make up a significant amount of their worktime. Although each job must be considered on the basis of its actual physical work conditions and work activities, this table lists jobs that typically are included in and excluded from this definition:

(1) EXAMPLES OF JOBS THAT TYPICALLY ARE MANUFACTURING JOBS	(2) EXAMPLES OF JOBS THAT TYPICALLY ARE NOT MANUFACTURING JOBS
(i) Assembly line jobs producing (A) Products (durable and non-durable) (B) Subassemblies (C) Components and parts (ii) Paced assembly jobs (assembling and disassembling) (iii) Piecework assembly jobs (assembling and disassembling) and other time-critical assembly jobs (iv) Product inspection jobs (e.g., testers, weighers) (v) Meat, poultry, and fish cutting and packing (vi) Machine operation (vii) Machine loading/unloading (viii) Apparel manufacturing jobs (ix) Food preparation assembly line jobs (x) Commercial baking jobs (xi) Cabinetmaking (xii) Tire building	(i) Administrative jobs (ii) Clerical jobs (iii) Supervisory/managerial jobs that do not involve production work (iv) Warehouse jobs in manufacturing facilities (v) Technical and professional jobs (vi) Analysts and programmers (vii) Sales and marketing (viii) Procurement/purchasing jobs (ix) Customer service jobs (x) Mail room jobs (xi) Security guards (xii) Cafeteria jobs (xiii) Grounds keeping jobs (e.g., gardeners) (xiv) Jobs in power plant in manufacturing facility (xv) Janitorial (xvi) Maintenance (xvii) Logging jobs (xviii) Production of food products (e.g., bakery, candy and other confectionary products) primarily for direct sale on the premises to household customers.

*Materially reduce MSD hazards* means to reduce the duration, frequency and/or magnitude of exposure to one or more ergonomic risk factors in a way that is reasonably anticipated to significantly reduce the likelihood that covered MSDs will occur.

*Musculoskeletal disorders (MSDs)* are injuries and disorders of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs. Exposure to physical work activities and conditions that involve risk factors may cause or contribute to MSDs. MSDs do not include injuries caused by slips, trips, falls, or other similar accidents. Examples of MSDs include:

- (1) Carpal tunnel syndrome;
- (2) Rotator cuff syndrome;
- (3) De Quervain's disease;
- (4) Trigger finger;
- (5) Tarsal tunnel syndrome;
- (6) Sciatica;
- (7) Epicondylitis;
- (8) Tendinitis;
- (9) Raynaud's phenomenon;
- (10) Carpet layers knee;
- (11) Herniated spinal disc;
- (12) Low back pain.

*MSD hazards* are physical work activities and/or physical work conditions, in which ergonomic risk factors are present, that are reasonably likely to cause or contribute to a covered MSD.

*MSD management* is your process for ensuring that employees with covered MSDs receive prompt and effective evaluation, management and follow-up, at no cost to them, in order to prevent permanent damage or disability from occurring.

(1) In this standard, the MSD management process includes:

(i) Evaluation, management and follow-up of injured employees by persons in the workplace and/or by HCPs; and

(ii) A method for identifying available work restrictions and promptly providing them when needed.

(2) MSD management does not include establishing specific medical treatment for MSDs. Medical treatment protocols and procedures are established by the health care professions.

*MSD signs* are objective physical findings that an employee may be developing an MSD. Examples of MSD signs include:

(1) Decreased range of motion;

(2) Deformity;

(3) Decreased grip strength;

(4) Loss of function.

*MSD symptoms* are physical indications that an employee may be developing an MSD. Symptoms can vary in severity, depending on the amount of exposure to MSD hazards. Symptoms often appear gradually as muscle fatigue or pain at work that disappears during rest. Symptoms usually become more severe as exposure continues (e.g., tingling continues after work ends, numbness makes it difficult to perform the job, and finally pain is so severe the employee cannot perform the job). Examples of MSD symptoms include:

(1) Numbness;

(2) Burning;

(3) Pain;

(4) Tingling;

(5) Cramping;

(6) Stiffness.

*No cost to employees* means that PPE, training, MSD management and other requirements of this standard are provided to employees free of charge and while they are "on the clock" (e.g., paying for time employees spend receiving training outside the work day).

*OSHA recordable MSD* is an MSD that meets the occupational injury and illness recording requirements of 29

CFR Part 1904. Under Part 1904, an MSD is recordable when:

(1) Exposure at work caused or contributed to the MSD or aggravated a pre-existing MSD.

(2) The MSD results in at least one of the following:

(i) A diagnosis of an MSD by an HCP.

(ii) A positive physical finding (e.g., an MSD sign or a positive Finkelstein's, Phalen's, or Tinel's test result).

(iii) An MSD symptom plus at least one of these:

(A) Medical treatment;

(B) One or more lost work days;

(C) Restricted work activity;

(D) Transfer or rotation to another job.

*Periodically* means that a process or activity, such as records review or training, is performed on a regular basis that is appropriate for the conditions in the workplace. Periodically also means that the process or activity is conducted as often as needed, such as when significant changes are made in the workplace that may result in increased exposure to MSD hazards.

*Persistent MSD symptoms* are "MSD symptoms" that persist for at least 7 consecutive days after they are reported.

*Personal protective equipment (PPE)* is equipment employees wear that provides an effective protective barrier between the employee and MSD hazards. Examples of PPE are vibration-reduction gloves and carpet layer's knee pads.

*Physical work activities* are the physical demands, exertions and functions of the task or job.

*Problem job* is a job in which a covered MSD is reported. A problem job also includes any job in the workplace that involves the same physical work activities and conditions as the one in which the covered MSD is reported, even if the jobs have different titles or classifications.

*Resources* are the provisions necessary to develop, implement and maintain an effective ergonomics program. Resources include money (e.g., to purchase items such as job hazard analysis equipment, training materials, and controls), personnel, and work time to conduct program responsibilities (e.g., job hazard analysis, program evaluation).

*Work practice controls* are changes in the way an employee performs the physical work activities of a job that reduce exposure to MSD hazards. Work practice controls involve procedures and methods for safe work. Examples of work practice controls for MSD hazards include:

(1) Training in proper work postures;

(2) Training in use of the appropriate tool;

(3) Employer-authorized micro breaks.

*Work restriction protection (WRP)* means the maintenance of the earnings and other employment rights and benefits of employees who are on temporary work restrictions as though they had not been placed on temporary work restriction. For employees who are on restricted work activity, WRP includes maintaining 100% of the after-tax earnings employees with covered MSDs were receiving at the time they were placed on restricted work activity. For employees who have been removed from the workplace, WRP includes maintaining 90% of the after-tax earnings. Benefits mean 100% of the non-wage-and- salary value employees were receiving at the time they were placed on restricted work activity or were removed from the workplace. Benefits include seniority, insurance programs, retirement benefits and savings plans.

*Work restrictions* are limitations on an injured employee's exposure to MSD hazards during the recovery period. Work restrictions may involve limitations on the work activities of the employee's current job, transfer to temporary alternative duty jobs, or complete removal from the workplace. To be effective, work restrictions must not expose the injured employee to the same MSD hazards as were present in the job giving rise to the covered MSD.

*You* means the employer as defined by the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.).

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